Nafi Hassan
P1
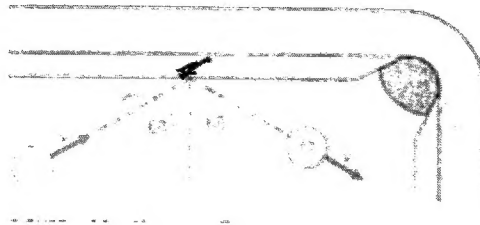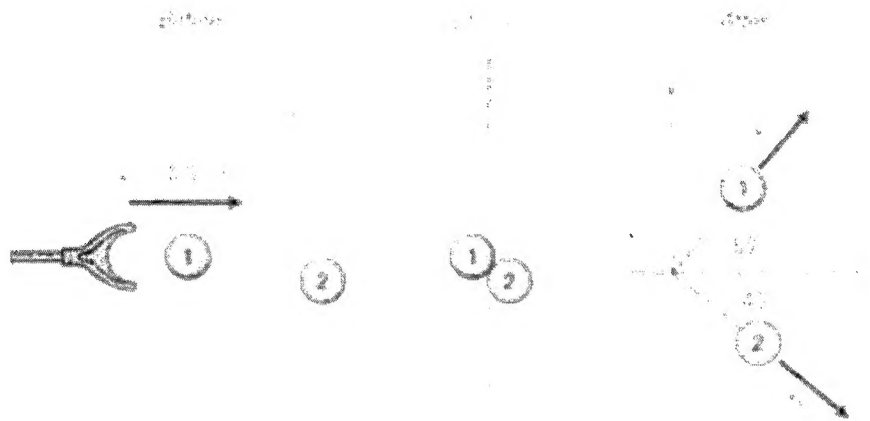
1) A .2-kg billiard ball traveling at a speed of 15 m/s strikes the side rail of the pool table at an angle pf 60°. If the ball rebounds at the same speed and angle, what is the change in momentum?

2) Suppose that the billiard ball approaches the pool rail at a speed of 15 m/s and at an angle of 60° but rebounds at a speed of 10 m/s and at an angle of 50°. What is the change in momentum?

3) A shuffleboard puck strikes a stationary second shuffleboard puck with the same mass. The initial velocity of the first puck is .95 m/s. After the collision puck one deflects at 50° and puck 2 deflects at 40°. Find the final velocities of the two pucks.

4) A mass traveling initially at 5.0 m/s collides with a second object of equal mass that is initially at rest. After the collision the objects move as shown. What is the speed of m_2 after the collision?